



Tropentag, September 18-20, 2019, Kassel

“Filling gaps and removing traps
for sustainable resource management”

Biodiversity in Animal Genetic Resources and their Importance for Environmental and Animal Welfare

RUDOLF BÜHLER

Bäuerliche Erzeugergemeinschaft Schwäbisch Hall, Germany

Abstract

The People's Republic of China does not only host the world's largest numbers of pigs but also the largest pool of animal genetic resources in terms of pig breeds. There are more than 120 autochthonous *Sus scrofa vitattus* breeds (Asian banded pigs) of which several were imported to England at the end of the 18th century and after 1816 also reached the mainland of the European continent. Until then, only *Sus scrofa scrofa* types as partially domesticated wild pigs were found in Europe. The most well-known descendant of the *Sus scrofa vitattus* sub-species is the Schwäbisch-Hällische Landschwein which originates from the Jinhua pig bred Hangzhou province; in 1820 it arrived via England to Stuttgart-Hohenheim in Germany.

Since the 1970s, pig farming in Europe is dominated by mainstream breeds and hybrids that are bred for maximum daily feed intake and optimised conversion of highly digestible feeds such as wheat, barley and soybeans. This implies a misguided luxury consumption of primary agricultural products which should, for reasons of economic and ecological sustainability, be reserved for human nutrition. However, Asian banded pigs and thus also the Schwäbisch Hällische Lanschwein, have the ability to utilise secondary agricultural raw materials in a resource-efficient manner due to physiological characteristics of their digestive tract. Sustainable strategies of pig meat production must account for such parameters that account for high resource efficiency.

Keywords: Breeds, genetic resources, pigs